ABOUT THE NUCLEAR CRITICALITY SAFETY PROGRAM

(NCSP)

fissionable material. Subsequently, DNFSB Recommendation 97-2 issued on

May 19, 1997 addressed the need for improved criticality safety practices and

important crosscutting safety activities needed to ensure nuclear criticality safety

Recommendations 93-2 and 97-2 resulted in the establishment of the NCSP,

**Recommendation 97-2.** To implement Recommendation 97-2 in an integrated

fashion, DOE took steps to ensure stable funding for the important crosscutting

NCSP is important to the successful completion of other DOE programs, such as

those programs which address Board Recommendations 97-1, 94-1, 94-4, and

The NCSP is funded by the National Nuclear Security Administration (NNSA).

Nuclear Data Advisory Group (NDAG) regarding technical matters and by the

Criticality Safety Coordinating Team (CSCT), consisting of Federal Criticality

Safety Practitioners at the sites regarding DOE field criticality safety issues.

The Mission and Vision for the NCSP provides the planning basis for the next five

to ten years for all funding and initiatives undertaken by the NCSP in five broad

initiatives are executed annually in a series of updates to a rolling Five-Year Plan.

and is developed/updated with the advice and assistance of experts appointed by

the NCSP Manager or working under charters approved by the NCSP Manager.

technical program elements that support identified goals. The NCSP and its

It also defines the values and operating culture of the NCSP and facilitates

development of a coherent, integrated implementation plan. The Five-Year

Execution Plan has been the plan to achieve the five-year vision of the NCSP

Charters for the CSSG, NDAG, and the CSCT can be found on the NCSP website (http://ncsp.llnl.gov/cssgMain.html), and these support groups perform

the technical support functions for the NCSP described inside.

They are supported by the Criticality Safety Support Group (CSSG) and the

implementation of the 97-2 crosscutting criticality safety activities under the

programs to alleviate potential adverse impacts on safety and productivity of DOE operations. Recommendation 97-2 encompassed the ongoing Department

activities of Recommendation 93-2 while broadening the scope to address

throughout the Complex. The DOE Implementation plan for Board

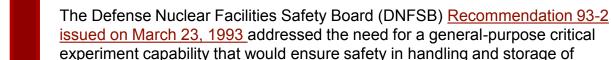
and the ongoing criticality safety activities of the DOE have been performed under the NCSP that has been established per Board

safety activities required by the recommendation. Further, effective

**History** (Why the NCSP was Established):























95-2.









































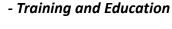












Dissemination

**NCSP Website:** 

- Integral Experiments

**Program Overview:** 

### - Information Preservation and

- Nuclear Data

### **NCSP Accomplishments:**

http://ncsp.llnl.gov/accomplishmentsMain.html

# WELCOME DR. ANGELA CHAMBERS AS THE NEW NCSP MANAGER

Angela earned her doctorate in nuclear engineering from the University of Texas at Austin. She holds a Master of Science degree in nuclear engineering and a Bachelor of Science in Physics, both from the Ohio State University. She began her career at the Portsmouth Gaseous Diffusion Plant serving in the project management, decontamination and recovery, nuclear criticality safety, and non-destructive assay groups. Angela was a technical staff member and program lead for Los Alamos National Laboratory for 11 years, working for the Probabilistic Analysis Group and then for Weapons Systems Engineering where she had assembly design responsibility for the W78 and W88 systems. She has been involved with Nuclear Explosive Safety since joining NNSA in 2009 and is responsible for NES oversight within DOE and the DOE NES directives. As an Air Force Reservist, Angela instructs military and civilian first responders on nuclear and radiological incidents and the use of radiation detection instrumentation for DoD's Defense Threat Reduction Agency. Angela has two daughters: Trinity and Tristan Ivy-Mike.



Dr. Angela Chambers **NCSP Manager** 

# DATES TO REMEMBER FY2017

• Jan 5, 2017 Request for Proposals distributed

• Feb 2, 2017 Written Proposals due

NCSP Technical Program Review • Mar 14-15, 2017

• Jul 26, 2017 **Budget Execution meeting** 

• Oct 1, 2017 FY18-22 Five Year Plan published

NCSP Planning Calendar: <a href="http://ncsp.llnl.gov/planMain.html">http://ncsp.llnl.gov/planMain.html</a>

## **Hands-On Training & Education Course Dates**

Two-week Practitioner Course Dates:

- Jan 30 Feb 10, 2017
- Aug 14 25, 2017

One-week Manager Course Dates:

- Jan 9 13, 2017
- June 19 23, 2017

Course Registration: <a href="http://ncsp.llnl.gov/classMain.html">http://ncsp.llnl.gov/classMain.html</a>

### **EXCITING NEWS**

KRUSTY - Kilopower Reactor Using Stirling TechnologY A Joint NCSP/NASA Project

## Some KRUSTY Triva:

- KRUSTY is a full-power nuclear test of a flight space reactor prototype, generating 1-10 kWe Kilopower.
- President Obama has a goal of putting men on Mars in 2030 for manned Mars missions and deep space science missions.
- KRUSTY is the first prototype space reactor to be designed and operated in over 50 years.
- NA-50/NCSP has the ball to execute KRUSTY criticals in FY17.
- NCSP mission overlap is to obtain high precision integral data.
- Experiments will be conducted in the National Criticality Experiments Research Center (NCERC) inside the NNSS's Device Assembly Facility (DAF).
- Scientists and other experts from the NNSS, NASA's Glenn Research Center, the Marshall Space Flight Center, Los Alamos National Laboratory and the Y-12 National Security Complex are collaborating on an experiment with the goal of producing a small, safe, reliable nuclear reactor that can function as a power source for astronauts on the surface of Mars.

CBS Las Vegas is broadcasting news stories on the KRUSTY Misson to Mars. See the folloing links:

http://www.lasvegasnow.com/news/i-team-nuclear-reactor-test-in-nevada-could-make-amars-trip-reality

http://mms.tveyes.com/PlaybackPortal.aspx?SavedEditID=f1c8d959-6831-43ac-9b1bff166c589ca8



The five technical program elements are:

- Analytical Methods Information



